

## *Chapter III*

# **TRANSPORTATION ELEMENT**

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This Transportation Element is a supplement to the TRPA Regional Transportation Plan (RTP) and the Placer County Transportation Element. Consistent with the RTP, this element lists the specific objectives and policies applicable to the Carnelian Bay Community Plan and describes the improvements recommended to implement the Plan. Specific improvements and schedules are found in Chapter VII, Implementation Element.

### **A. EXISTING TRANSPORTATION STUDY**

#### ***Streets and Highways***

State Route 28 is the main arterial through the Carnelian Bay Community Plan, linking this CP to other commercial nodes such as Tahoe City to the west, and Tahoe Vista, Kings Beach, and Stateline to the east.

State Route 28 is a two-lane highway through the Plan area, with an average 1990 peak monthly trips count of 15,600.

Connector roads that send trips to Highway 28 include Center Street, California Street, Carnelian Bay Avenue, Carnelian Woods Avenue, and Onyx Street. These roads are all included in the Placer County Road System.

The Levels of Service (LOS) for the main extent of Route 28, even during peak times is generally high, in the A to B range. Left-turn movements from connector roads to the state highway are sometimes at a lower LOS.

#### ***Parking Facilities***

Parking in the Carnelian Bay CP includes a mixture of public right-of-way parking (in the highway and county road rights-of-way) and private parking, as well as off-street public parking provided at recreation facilities such as the Tahoe Conservancy beaches.

Parking in the state highway right-of-way is primarily oriented in a parallel-parking arrangement.

#### ***Transit Facilities***

The Tahoe Vista Community Plan area is currently serviced by the Tahoe Area Regional Transit (TART) system. This is the only regularly scheduled public transit system provided on the North and West Shores. TART currently operates six days a week from 6:30 a.m. to 6:30 p.m. and services the entire Plan area along State Route 28. Service headways are every 60 minutes.

Other transit systems available within the Plan area include a demand responsive social service system provided by the Volunteer Center of Placer County. This service is available to clients over 60 year of age, handicapped and low income residents. Many ski resorts also provide a ski shuttle service.

### ***Pedestrian Facilities***

Formal pedestrian facilities, with the exception of some crosswalk areas, have not been developed in the Carnelian Bay area. Pedestrians must often share the right-of-way with cyclists and motorists, which, during periods of heavy usage, presents a less than ideal situation.

### ***Bicycle Facilities***

As with pedestrian facilities, there are presently no designated bicycle facilities connecting the commercial and recreational facilities found through the Community Plan area. Bicyclists often share the same right-of-way as the highway traffic which presents safety concerns.

## **B. TRANSPORTATION OBJECTIVES AND POLICIES**

The following numbered objectives relate to the transportation goal found in the Community Plan Goals section of Chapter I of this Plan. To meet the objectives, the following specific policies are adopted as standards.

1. Provide a safe and efficient transportation system for the residents of the Carnelian Bay area and the others who use the system.
  - a. Policy: The level of service on major roadways (i.e. arterial and collector routes) shall be LOS D, and signalized intersections shall be at LOS D (Level of Service E may be acceptable during peak periods, not to exceed four hours per day).
  - b. Policy: Organize the various functions currently accommodated in the public right-of-ways (e.g. through vehicle traffic, parking search, pedestrian activity, bicyclists activity, and parking).
  - c. Policy: Implement a parking management program that provides: adequate parking, limits traffic conflicts, considers connections between parking lots, encourages community parking lots, and complements transit.
  - d. Policy: When designing transportation improvement, consider traffic calming strategies such as alternate truck routes, speed reductions on State Route 28, entry features, highlighted pedestrian cross walks, etc.
2. Provide for sufficient capital improvements to meet the level of service target, meet the target for VMT reductions, and to provide adequate parking facilities as development occurs in the community plan area.
  - a. Policy: Allow businesses or properties which contribute to off-site community parking facilities or transit to be given some credit for satisfying their individual parking requirements.
  - b. Policy: The first priority for available funds shall be for projects listed in the CP Implementation Program.

- c. Policy: All projects shall analyze and mitigate their traffic/air quality impacts pursuant to Chapter 93 of the TRPA Code of Ordinances. Improvements listed in this element shall be added to the list of mitigation measures in Subparagraphs 93.3.C(2) and (3).
  - d. Policy: All projects shall be subject to the TRPA traffic/air quality mitigation fee program (Chapter 93 of the TRPA Code).
  - e. Policy: Provide for sufficient funding to finance the projects in the capital improvement program (CIP).
- 3. The Carnelian Bay Community Plan should promote land use changes and development patterns which will encourage the use of alternative transportation modes and reduce travel distances within the Community Plan.
  - a. Policy: The Plan shall provide for the in-fill of existing land areas, utilizing existing transportation facilities while promoting alternatives to the private automobile.
- 4. The Carnelian Bay Community Plan should encourage the use of public and private transit.
  - a. Policy: Public transit service should be offered for a period of at least 18 hours per day along State Route 28. The transit service headways should not exceed 30 minutes along State Route 28 between the hours of 6:00 a.m. and 6:00 p.m. and should not exceed 60 minute headways during the remainder of the service day.
  - b. Policy: The provision of public and private service should be coordinated to reduce costs of service and avoid duplication of services.
  - c. Policy: Provide the opportunity for water transit service.
- 5. The Plan should develop sidewalks along both sides of State Route 28 and local commercial streets. This includes landscaping, lighting, trash receptacles, and bicycle racks.
  - a. Policy: Implement a program through review of projects or preferably through improvement districts that provides for the street improvements described in the control program/action element.
- 6. The Carnelian Bay Community Plan should develop a bicycle recreational trails network with connections to recreation and commercial land uses.
  - a. Policy: Provide for a system of bicycle recreation trail in the community plan improvement program.
- 7. The Community Plan should implement transportation demand management (TDM) measures to reduce the number of vehicles travelling within the Community Plan.
  - a. Policy: Transit fare reductions, including free fares, should be used to

- encourage transit use.
- b. Policy: Condominiums, timeshares, hotels and motels should participate in public and private transit information and incentives to their guests and residents.
  - c. Policy: Home mail delivery should be provided throughout the Community Plan area.
8. Transportation System Management (TSM) measures should be provided to improve the efficiency of the existing transportation system within the Community Plan.
- a. Policy: Driveways and access-egress points to commercial businesses along State Route 28 should be coordinated to reduce the number of turn movements and improve traffic flow along State Route 28.
  - b. Policy: Parking within the Carnelian Bay Commercial Community Plan should encourage the consolidation of off-street public parking within the commercial areas.
9. The Community Plans for Carnelian Bay, Tahoe Vista, Kings Beach, and North Stateline all propose the completion of a follow-up study, after Plan adoption, that will examine a number of transportation issues affecting State Route 28. This study, intended to involve Caltrans, Placer County, TRPA, and interested citizens, will examine such issues as the appropriate number of travel lanes on the highway, the use of center medians, techniques for "traffic calming," and regulation of travel speed.

### **C. PROPOSED TRANSPORTATION IMPROVEMENTS**

This section provides a list and description of projects and programs which are intended to solve the traffic and air quality problems while supporting the goals and policies of other elements of the Plan. If all the items on the list were successfully implemented, it appears that congestion would be reduced to a level which is better than that called for in the Plan. The Plan incorporates all of the projects and programs as mitigation measures to be considered under Subsections 93.C.(2) and (3). Implementation of the Transportation Element is intended to be a dynamic process which will be responsive to future levels of congestion, utilize the results of new studies, and monitor the effectiveness of projects and programs which have been implemented.

#### ***Streets and Highways***

1. State Route 28 Improvements: State Route 28 shall be improved to include three lanes (one in each direction with a center turn lane), Class II bikeways on each side, and parallel parking where appropriate. The construction of the highway improvements will be in conjunction with the construction of winding sidewalks, curbs, drainage system, landscaping, utility undergrounding and lighting. Minimal intersection improvements at Carnelian Bay Road and State Route 28 may be needed including a Traffic Control Officer during peak times.

### ***Parking Facilities***

1. Parking Standards and Guidelines - Application of the Parking Standards and Guidelines through Project Review will require:
  - a. Parking spaces and non-parking areas should be clearly delineated and enforced. Vehicles parking at improper locations impede traffic flow and reduce safety. Physical barriers, such as curbing or planters, may be necessary.
  - b. The location, layout, and number of spaces should be planned to reduce highway conflicts.
  - c. The operation of parking lots be modified to reduce impacts.
2. Community Parking Lot System - To meet parking requirements, mitigate State Route 28 improvements, achieve targets, and provide for Lake access, a series of parking lots are required. The Carnelian East and Carnelian West lots are conceptual in design and location will be utilized for public use, thereby increasing the availability of public spaces.
3. State Route 28 Improvements - Conversion of on-street parking from diagonal to parallel with mitigation can reduce roadway friction, increase speeds, and help safety.

### ***Transit Facilities***

1. TART Expansion - Policy 4.A calls for increased service from TART by increasing headway, by increasing the variety of vehicles, and by increasing the hours of operation. An improved maintenance facility for servicing transit vehicles is an important component to any increase in service. Transit stops are included in the area of the marina. Possible locations of routes, bus stops, and parking lots are shown in Figure 1 and further described in Chapter VII.
2. Water Transit Terminal - Opportunities for a water transit are included in the area of the marina and the U.S. Forest Service Interpretive Center.
3. Transit Facilities - The Plan calls for the construction of bus stops near parking and the marina.
4. Lake Tour Bus - An around-the-Lake bus system provides longer range trips for visitors and residents.
5. Ski Tour Shuttles - Coordination of transit services to recreational destinations (i.e., ski bus) could provide improvement during critical winter peaks.

### ***Pedestrian Facilities***

1. State Route 28 Sidewalk Facilities - The Plan requires the construction winding sidewalks in the State Route 28 area. The conceptual design of the sidewalk system is described in Chapter VII.
2. Crosswalks - The number and location of crosswalks are an important element of

any pedestrian system.

### ***Bicycle Facilities***

1. NTPUD Connector Trail - To improve circulation and lake access, an access trail between the Lake and the NTPUD Dollar Hill Recreation Area Trail should be constructed.
2. Highway 29 Bike Lanes - To increase safety and provide convenient bicycle access throughout the commercial core, on-street bike lanes should be provided along both sides of Highway 28.

### ***Other Transportation Mitigation Measures***

1. Mini Van Demand/Response Fleet - Establish a mini van demand-response fleet at the ski areas for visitors and employees.
2. Information and Contingency Plan - TMA shall develop a faster and more accurate traffic information system for the travelling public, and develop contingency plans for road closure and gridlock conditions.
3. Truck Access - Provisions will be provided off the State Highway for the loading/unloading of trucks. Off-peak delivery of goods reduces vehicles, awkward turning movements, and parking associated with trucks.
4. Traffic Control Officer - In lieu of traffic signals at critical intersections, a traffic control officer (TCO) may be utilized during peak periods. The TCO is more responsive to pedestrian, bikes, and short term fluctuations in traffic.
5. Alternate Mail Delivery - Develop an alternate method to deliver mail, such as a cluster box system, which would eliminate the need for postal customers to travel to the post office so often.
6. Access Points Onto Roads and Highways - Combine, eliminate, relocate, or improve driveways onto the road and highway system. Congestion improvement and traffic safety benefits can be realized by improving access points along critical routes.
7. Transportation Management
  - a. The State mandated Congestion Management Program (CMP) includes a section on Trip Reduction Ordinances (TRO). The County and TRPA have TROs, which apply to this area. The goal of the TRO is to have employers educate, coordinate, and encourage strategies to reduce congestion and improve air quality. Working with employees at the work place can be an effective method because of the common destination point and hours of employment. Employers could institute a program with provisions beyond those required by the TRO.
  - b. The Truckee-North Tahoe Transportation Management Association (TNT/TMA) is a group of public agencies and private firms which have

joined together to develop and implement programs and projects to reduce congestion and provide for the transportation needs of residents, visitors, and employees in the Lake Tahoe area. The TMA is an active and important coalition that is successfully addressing regional transportation problems. Membership and participation in the TMA can be a positive step for businesses, agencies and individuals to take.

- c. Incentives to ride transit can be implemented by employers and commercial/recreational related businesses. The incentive could be financial or convenience related. A disincentive would be to discontinue parking subsidies to employees and customers.